## QUALITY AND MANUFACTURING MANAGEMENT (QMM)

QMM 552: Applied Statistical Process Control and Experimental Design

3 Credits

Concepts and techniques of statistical process control and the design of

Prerequisite: QMM 851

QMM 561: Manufacturing Systems Planning and Control I

3 Credits

Systems, components and configurations, flow of material and information in a manufacturing system.

Prerequisite: admission to the QMM program

QMM 562: Manufacturing Systems Planning and Control II

3 Credits

Flow of material and information in a manufacturing system; emphasis on systems integration.

Prerequisite: QMM 561

QMM 581: Manufacturing Processes of Materials

3 Credits

Characteristics of materials with respect to their properties and associated choices of processing to create a range of products.

Prerequisite: admission to the QMM program

QMM 582: Manufacturing and Supply Chain Strategy

3 Credits

Strategic decision context of manufacturing and its supply chains with linkage to corporate and business strategy.

Prerequisite: enrollment in the QMM program

QMM 593: Field Experience in Manufacturing

1-2 Credits/Maximum of 2

Experiential learning through the firsthand study of manufacturing plants and by interacting with manufacturing leaders.

**Prerequisite:** admission to the Quality and Manufacturing Management (QMM) Program

QMM 596: Individual Studies

1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, that are supervised on an individual basis and which fall outside the scope of formal courses.

QMM 597: Special Topics

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or semester.

QMM 851: Quality Management

3 Credits

Concepts of design, assessment, and improvement of quality systems; customer needs analysis, identification of opportunities for application of measurement techniques.

Prerequisite: admission to the QMM program

QMM 871: Design Practice for Manufacturing I

3 Credits

Contemporary concepts in design and design practice with emphasis on engineering, business, and human strategic issues.

Prerequisite: or concurrent: QMM 491 or QMM 492

QMM 872: Design Practice for Manufacturing II

3 Credits

Contemporary concepts in design and design practice with emphasis on logistics, risk, design and manufacturing readiness, and production.

Prerequisite: QMM 871

QMM 891: Communication and Leadership Skills for Manufacturing Managers

1-3 Credits/Maximum of 3

Applied principles of managerial, visual, and written communication that support the needs of manufacturing leaders.

Prerequisite: admission to the QMM Program